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EXAMINER
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VO, HAI

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1771

DATE MAILED: 06/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.



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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Application Number: 09/898,969  
Filing Date: July 03, 2001  
Appellant(s): LHILA, RAMESH

**MAILED**

JUN 27 2005

**GROUP 1700**

\_\_\_\_\_  
Donald J. MacDonald, Esq.  
For Appellant

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed 06/20/2005.

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**(1) *Real Party in Interest***

A statement identifying the real party in interest is contained in the brief.

**(2) *Related Appeals and Interferences***

Appellant's brief includes a statement that there are no related appeals or interferences.

**(3) *Status of Claims***

The statement of the status of the claims contained in the brief is correct.

**(4) *Status of Amendments After Final***

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) *Summary of Invention***

The summary of invention contained in the brief is correct.

**(6) *Grounds of Rejection to be Reviewed on Appeal***

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) *Claims Appendix***

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The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

The following is a listing of the evidence (e.g., patents, publications, Official Notice, and admitted prior art) relied upon in the rejection of claims under appeal.

5,612,136	EVERAERTS et al	03-1997
5,503,927	RAGLAND et al	04-1996
5,308,887	KO et al	05-1994
5,264,278	MAZUREK et al	11-1993
3,707,521	DE SANTIS	12-1972

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

**1. Claims 1-8, 11-14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521).**

Everaerts discloses an adhesive tape comprising a core layer and a pressure-sensitive adhesive layer coated on at least one side of the core layer (column 9, lines 30-60). The core layer of the adhesive tape of Everaerts corresponds to the backing layer of the claimed invention. Everaerts discloses *the core layer comprising an acrylic copolymer which may incorporate similar or dissimilar acrylic monomers having similar or different additives from those acrylic copolymers contained in the adhesive layer. The*

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*core layer comprises about 80 parts or more of an alkyl acrylate monomer, and up to about 20 parts of a copolymerizable modifier monomer, based upon 100 parts by weight of acrylic monomer, i.e. alkyl acrylate monomer plus modifier monomer* (column 9, lines 40-48). Everaerts also discloses alkyl acrylate monomers can be formed from a mixture of two independent monomers (column 5, lines 20-25). The same token is applied to the modifier monomers. Everaerts discloses modifier monomers can be formed from a mixture of two independent monomers, basic monomer and acidic monomer (column 5, lines 36-49, column 7, lines 20-39). Everaerts discloses a core layer of the pressure sensitive adhesive tape further comprising a filler and a crosslinker. Everaerts discloses the presence of the primer layer between the acrylic foam core and the pressure sensitive adhesive (column 10, lines 30-31 and table 9). The foam tapes with the use of a primer are subjected to 180° Peel Adhesion testing. The results of the tests in Table 9 show interfacial failure between the primer and foam backing (FP). Everaerts does not specifically disclose a composition of the primer layer. Ragland, however, teaches a pressure sensitive adhesive laminate comprising a silicone foam, an acrylic pressure sensitive adhesive layer, and a urethane primer layer disposed between the silicone foam and an acrylic pressure sensitive adhesive layer to provide the laminate having long-term bond strength (abstract). This is important to the expectation of successfully practicing the invention of Everaerts, thus suggesting the modification. Ragland discloses that the composition of the primer layer can be found in US 3,779,794 to De Santis (column 6, line 65-67 to column 7, line 1). De Santis evidences that the urethane primer is made from a silane modified elastomer solution (column 6, lines 72-75).

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Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silane modified elastomer solution as the primer layer of Everaerts motivated by the desire to provide the adhesive tape with long-term bond strength.

Everaerts does not specially disclose the amount of each individual monomer in the foam layer. However, these features would have been recognized by one skilled in the art as dependent upon the intended use of the product. As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the cited monomers having the amount ranges instantly claimed motivated by the desire to provide an adhesive tape having excellent ability to adhere to acid-rain resistant automotive paints. This is in line with *In re Aller*, 105 USPQ 233 which holds that discovering the optimum or workable ranges involves only routine skill in the art.

Everaerts discloses the core layer comprising 5 to 65 volume percent of hollow glass microspheres (column 9, lines 40-43). However, the feature would have been recognized by one skilled in the art to promote the foam-like appearance of the core layer (column 9, line 53). As such, in the absence of unexpected results, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the microsphere having the amount range instantly claimed motivated by the desire to promote the foam-like appearance of the core layer. This is also in line with *In re Aller*, 105 USPQ 233.

**2. Claims 9, 10, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, further in view of Ko et al (US 5,308,887).**

Everaerts discloses a core layer of the pressure sensitive adhesive tape further comprising a filler and a crosslinker (column 9, line 65 et seq.). Ko discloses silica, and hydrophobic silica being used a filler in the core layer (column 14, lines 45-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silica or the fumed hydrophobic silica as the filler of the core layer motivated by the desire to alter the properties of the core layer.

**3. Claims 17 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, further in view of Mazurek et al (US 5,264,278).**

Everaerts is silent as to 1,4-butanediol diacrylate as a crosslinker and coloring agent as a filler. Mazurek supplies the missing features. Mazurek discloses 1,4-butanediol diacrylate incorporated into the adhesive composition as a crosslinker and a dye being used as a filler (column 11, line 43, and column 12, line 41). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect crosslinking. It would have been obvious to one having ordinary skill in

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the art at the time the invention was made to have incorporated a dye into the core layer motivated by the desire to colorize the adhesive tape.

**4. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Everaerts et al (US 5,612,136) in view of Ragland et al (US 5,503,927) as evidenced by William de Santis (US 3,707,521), as applied to claim 1, in view of Ko et al (US 5,308,887) and Mazurek et al (US 5,264,278).**

Everaerts discloses the photoinitiator being benzoin ethyl ether (column 9, lines 6-7). Ko discloses a core layer of the pressure sensitive adhesive tape further comprising a hydrophobic silica as a filler (column 14, lines 47-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the fumed silica into the core layer by the desire to alter the properties of the core layer.

Everaerts is silent as to 1,4-butanediol diacrylate in the core layer. Mazurek discloses 1,4-butanediol diacrylate being used as a crosslinker (column 11, line 43). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have incorporated 1,4-butanediol diacrylate into the core layer motivated by the desire to effect cross-linking.

**(10) Response to Argument**

**Examiner's comments regarding to Appellant's issue 1:**

a. Claim 1:



Appellant argues that the examiner has not identified any teaching, suggestion, or motivation to combine Everaerts with Ragland and De Santis to arrive at the invention of claim 1. Appellant asserts that Everaerts is directed to a pressure sensitive adhesive tape having improved adhesion to acid-rain resistant automotive paints. Everaerts discloses the use of an adhesive to mount a device to a surface. Appellant goes on and states that Ragland, on the other hand, is directed to the manufacture of the pressure sensitive adhesive tape and does not discuss the use of the tape to bind two objects. Appellant asserts that the use of an adhesive to mount a device to surface is not indicative of the structural integrity of a tape. Therefore, Appellant concludes that one of skill in the art would not look to combining an adhesive for adhering objects to surfaces with devices having adhesives directed to improving bond strength within the device. The examiner disagrees. Everaerts discloses a pressure sensitive adhesive tape comprising a core layer and a pressure-sensitive adhesive layer coated on at least one side of the core layer (column 9, lines 30-60). The core layer of the adhesive tape of Everaerts corresponds to the backing layer of the claimed invention. The adhesive composition of Everaerts comprises all the individual monomers as required by the claims (column 5, lines 20-25, 36-49, column 7, lines 20-39 and column 9, lines 40-48). Everaerts discloses the presence of the primer layer between the acrylic foam core and the pressure sensitive adhesive (column 10, lines 30-31 and table 9). The foam tapes with the use of a primer are subjected to 180° Peel Adhesion testing. The results of the tests in Table 9 show interfacial failure between the primer and foam backing (FP). Everaerts does not specifically disclose a composition of the primer layer. Ragland,

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however, teaches a pressure sensitive adhesive laminate comprising a silicone foam, an acrylic pressure sensitive adhesive layer, and a urethane primer layer disposed between the silicone foam and an acrylic pressure sensitive adhesive layer to provide the laminate having long-term bond strength (abstract). Ragland's silicone foam corresponds to Everaerts's acrylic foam core. The teaching of Ragland would give the skilled artisan the tools necessary to conclude that the use of the urethane primer between the foam layer and the pressure sensitive adhesive layer promotes the bond strength between them. This is important to the expectation of successfully practicing the invention of Everaerts, thus suggesting the modification. Ragland discloses that the composition of the primer layer can be found in US 3,779,794 to De Santis (column 6, line 65-67 to column 7, line 1). De Santis evidences that the urethane primer is made from a silane modified elastomer solution (column 6, lines 72-75). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ the silane modified elastomer solution as the primer layer of Everaerts motivated by the desire to provide the adhesive tape with long-term bond strength. Therefore, it is the examiner's position that Ragland is properly combinable with Everaerts and the combination is sufficient to establish a *prima facie* case of obviousness.

b. Claims 2-8, 11-14 and 18:

Appellant reiterated positions taken with respect to the other rejections and the examiner's comments set forth above are equally pertinent in the support of these rejections.

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**Examiner's comments regarding to Appellant's issues 2-4:**

Again, Appellant reiterated positions taken with respect to the other rejections and the examiner's comments set forth above are equally pertinent in the support of these rejections as well.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

HV  
June 23, 2005

Conferees  
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Rena Dye *RD*

*Hai Vo*

**HAI VO  
PRIMARY EXAMINER**

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